

EDITOR'S NOTE

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Welcome to this special issue on “Advances in Mobile Computing and Multimedia” guest-edited by Dr. Eric Pardede at La Trobe University, Melbourne, Australia.

The recent developments in social networks, peer-to-peer applications, mobile Internet and the availability of Smartphones and associated high-speed mobile networks have increased the deployment and use of mobile multimedia applications and services, hence the need for understanding the information semantics, query optimization, and contextualization in this changing digital environment.

Thanks to Dr. Pardede for putting together such a nice collection of research articles from the 8th International Conference on Advances in Mobile Computing and Multimedia (MoMM'2010) held in Paris, France, during November 8-10, 2010.

In the first paper, Aleksy, Stieger, and Janke describe an approach utilizing semantic and mobile technologies to enable the provisioning of the right information, at the right time, in the right place to the right set of users. They present an architecture for semantic data federations that provides an integrated approach to deliver tailored information from very heterogeneous information sources supporting various user roles in the service process. Experiments with mobile clients in the above architecture provide promising results.

In the next paper, Nadamoto, Aramaki, Abekawa and Murakami present an innovative

approach that extracts the gist of information in a thread in a Social Network Service (SNS) by comparing the comments in the thread with the content of a corresponding Wikipedia article. They use a method based on coverage degree to compare the comments in a thread with the information in the table of content of the Wikipedia article and select the appropriate paragraph in the article that provides the gist of the SNS thread.

The third paper by Vidal, de Macêdo, Pinheiro, Casanova, and Porto describes a three-level mediator based framework for linked data integration over Linked Data environment used in Web publishing. This framework takes a query on domain ontology and rewrites it into sub-queries submitted over multiples data sources. The query's result is obtained by the proper combination of data resulting from these sub-queries. An algorithm for reformulating a user query into sub-queries over the data sources has been developed and the effectiveness of the algorithm is illustrated using example queries and results.

Abdulrazak, Roy, Gouin-Vallerand, Belala, and Giroux in the fourth paper describe two context-awareness models, the macro and micro approaches that define and integrate contextual views of individual pervasive components and global knowledge of the system, and provide a more detailed overview of a micro context-aware programming model for open smart space problems. With the strong support of

macro systems in controlled space and the robust implementation of micro systems in open space, the authors hope to be able to provide continuity of service to those individuals and systems that need it.

The last paper by Wauer, Meinecke, Schuster, Konzag, Aleksy, and Riedel, presents an architecture that supports the federation of heterogeneous information, originating from various data sources and arising throughout the product lifecycle. The authors claim that the

proposed generic architecture for federating heterogeneous information from various sources overcomes the limitations of less flexibility and limited coverage of the current product information management systems.

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